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way of a so-called pulse inverter and its output voltage space indicator on the output side operates on the principle of discrete-time change in switching condition control with a clock frequency in the 100-kHz range directly from a two-point control loop which adjusts the instantaneous value of the synthesized signal z to the set value of this signal, then no self-excited oscillations arise in this two-point control loop for the synthesized signal z .

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9. A device and a process as described in Claim 6, wherein the limit frequency value selected for the low-pass filter with low-pass transfer function $FT(p)$ is low enough so that, if the drive winding is energized by direct current by way of a so-called pulse inverter and its output voltage is derived in accordance with the principle of discrete-time change in switching condition control with a clock frequency in the 100-kHz range directly from a two-point control loop which adjusts the instantaneous value of the synthesized signal z to the set value of this signal, then no self-excited oscillations arise in this two-point control loop for the synthesized signal z .

10. A device and a process as described in Claim 1, wherein the low-pass filter with low-pass transfer function $FT(p)$ is dimensioned so that its limit frequency is lower than 10 kHz.

11. A device and a process as described in Claim 1, wherein the circumstance constantly occurring in practical application that the connection between the measured substitute acceleration signal bEm and the measured acceleration signal αm is only incompletely described by the equation $\alpha m = Fg(p) \cdot bEm$ and accordingly, in order for the actual conditions to be taken

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into account is to be replaced by the relation $\alpha_m = FM(p) Fg(p)$ bEm , in which transfer function $FM(p)$ describes the mechanical frequency response from the surface of the armature set in movement which is engaged by the thrust of the drive to the position of the part of the accelerometer set in movement at which the effect used for registration of acceleration is generated is taken into account by replacing the high-pass filter in question with the high-pass transfer function $FH(p) = FT(0) - FT(p)$ $Fg(p)$ with a modified high-pass filter with modified high-pass transfer function $Fh(p) = FT(0) - FT(p)$ $Fg(p)$ $FM(p)$, it being advisable in this process not to determine the limit frequency of the low-pass filter with low-pass transfer function $FT(p)$ until the high-pass filter with high-pass transfer function $FH(p)$ has been replaced by a modified high-pass filter with modified high-pass transfer function $Fh(p)$.

12. A device and a process as described in Claim 1, wherein the circumstance constantly occurring in practical application that the connection between the measured substitute acceleration signal bEm and the measured acceleration signal α_m is only incompletely described by the equation $\alpha_m = Fg(p) bEm$ and accordingly, in order for the actual conditions to be taken into account, is to be replaced by the relation $\alpha_m = FM(p) Fg(p) bEm$, in which transfer function $FM(p)$ describes the mechanical frequency response from the surface of the armature set in movement which is engaged by the thrust of the drive to the position of the part of the accelerometer set in movement at which the effect used for registration of acceleration is generated is taken into account in approximation

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by separating from the transfer function in question FM(p) that part

$$F_0(p) = \frac{(1+p \cdot T_{\mu}) \cdot (1+2 \cdot D_v \cdot p \cdot T_v + p^2 \cdot T_v^2) \cdot \dots}{(1+p \cdot T_i) \cdot (1+2 \cdot D_j \cdot p \cdot T_j + p^2 \cdot T_j^2) \cdot \dots}$$

which allows for one or more poles and/or zero positions with particularly high values of T_{μ} , T_v , T_i , or T_j , and by replacing the high-pass filter in question with high-pass transfer function $FH(p) = FT(0) - FT(p)$ $Fg(p)$ with a modified high-pass filter with modified high-pass transfer function $Fh^*(p) \approx F\gamma(0) - FT(p)$ $F8(p)$ $F0(p)$, it being advisable not to determine the limit frequency of the low-pass filter with low-pass transfer function $FT(p)$ in this process until the high-pass filter with high-pass transfer function $FH(p)$ has been replaced by a modified high-pass filter with modified high-pass transfer function $Fh^*(p)$.

REMARKS

The above changes eliminate multiple dependency in the claims.

Respectfully submitted,

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